3800ESD Series

Handheld Linear Imager for ESD Sensitive and Clean Room Applications

Features

High Resolution - Reads very high density bar codes 3 mil. and larger.

Clean Room Ready - Cleaned and triple bagged for Class 100 environments.

Bright, Sharp and Focused Aiming Line - Easy to aim and scan codes in any lighting condition from darkness to full sunlight, tightly stacked bar code sheets, or small, high resolution labels.

Solid, Rugged Design - No moving parts inside and solid construction outside deliver years of reliable service in demanding work environments.

Powerful, Flexible Architecture - Connects and interfaces to all major PCs and commercial terminals easily and quickly with Windows®-based programming tools or bar code programming menus.

Increased Reading Distances - Easily covers the full range of handheld scanning uses in industrial scanning applications.

Real World Reading Performance - Accommodates printer induced bar space variation, faded labels, short quiet zones, low contrast codes, dot matrix printing, and multipart forms with higher resolution, better optics, and improved decoding algorithms.

5 Year Warranty

The 3800ESD is a high performance scanner designed for the stringent requirements of clean room assembly of sensitive electronic components. The 3800ESD is constructed of conductive materials engineered to eliminate the build up of dangerous static charge on the scanner, and to quickly drain the charge from any other object with which it comes in contact. The 3800ESD is assembled for use in a Class 100 clean room environment and is triple bagged for proper introduction into the end use environment.

Internal components of the 3800ESD scanner are isolated from the conductive path formed by the case, output connector shield, and special shielded cable with drain wire. The scanner is rated for discharges up to 15 kV without damage.

Two models are available: the 3800VHD/ESD which reads very high density bar codes, and the 3800LR/ESD for more typical applications.

All materials used in the 3800ESD are tested using the methods described in ASTM D257, Standard Test Methods for Conductance of Insulating Materials. The surface resistivity is rated at less than 10E5 ohms/square. Triboelectric residual charge is measured with a non contact Electrostatic Field Meter and is less than 5 volts on any surface.

To learn how the 3800ESD can work for you, contact us at any of the locations listed on the back or visit us at **www.handheld.com**.

3800ESD Series Specifications

Performance

Illumination:	630 NM Visible Red LED
Receiving Device:	3648 element linear imager
Reading Distance:	1 in. (2.5 cm) to 8 in. (20.3 cm) on medium density codes
Reading Width:	5 in. (12.7 cm) code width at 7 in. (17.8 cm) distance
Resolution:	
VHD:	3 mil. at 3.5 in. (8.8 cm) distance
LR:	5 mil. at 3.5 in. (8.8 cm) distance
Skew Angle:	±55º
Pitch Angle:	±55º
Horizontal Velocity:	5 in. (12.7 cm) per second
Minimum Reflectance Difference:	30%
Scan Rate:	Programmable to 270 scans per second
Decode Rate:	270 decodes per second

Mechanical/Electrical

Dimensions	
Length:	5.3 in. (13.5 cm)
Height	6 in. (15.2 cm)
Width:	3.1 in. (7.9 cm)
Weight:	6.3 oz. (179.2 g)
Housing:	Polycarbonate
Power Requirements:	5Vdc ± 10% at scanner

Current Draw:	Scanning	Standby
@270 s/s	275mA	125mA
@67 s/s	150mA	125mA

Power Supply Noise Rejection:	Maximum 100mV peak to peak, 10 to 100 kHz

Environmental

Temperature	
Operating:	+32ºF to +122ºF (0ºC to +50ºC)
Storage:	-4ºF to 140ºF (-40ºC to +60ºC)
Humidity:	0 to 95%
Mechanical Shock:	Operational after 25 drops from 5 ft. (1.53 m) to concrete
Ambient Illumination:	0 - 70,000 lux
ESD Protection:	Functional after 15kV discharge
Vibration:	Withstands 5G peak from 20 to 300 Hz
Agency:	FCC Class B, CE EMC Class B, CE Low Voltage Directive, IEC60825-1 LED Safety: Class 1, UL, cUL listed, TÜV
MTBF:	per MIL-HDBK-217F Ground Benign exceeds 50,000 hours
Symbologies:	Codabar, Code 3 of 9 including PARAF, Interleaved 2 of 5, Code 2 of 5, Matrix 2 of 5, Code 11, Code 93, Code 128, UPC, EAN/JAN, China Postal Code, RSS.
Interfaces:	All popular PCs and terminals via keyboard wedge, keyboard replacement/direct connect, Apple ADB, USB, TTL level serial wedge, TTL level RS-232, wand emulation mode, and includes (HHLC) non decoded laser compatible output.
Warranty:	Five year factory warranty.